

IN THE CLAIMS:

The following listing reflects the current version of all claims, and replaces all earlier versions and listings:

Claim 1. (Currently Amended) A description document for a service offered by a server (S) in a communication network (H), comprising:

a first abstract part adapted to describe at least one message exchanged over the communication network (H) when ~~said~~ the service is implemented;

and a second concrete part adapted to describe the information relating to the transmission of ~~said~~ the messages over the communication network, ~~characterized in that it comprises, in~~

wherein said first abstract part comprises[[,]] a description of abstract constraints associated with a binary multimedia document.

Claim 2. (Currently Amended) A service description document according to claim 1, characterized in that said description of abstract constraints is represented using the semantics of a description language of a content of a binary multimedia document.

Claim 3. (Original) A service description document according to one of Claims 1 to 2, characterized in that said description of abstract constraints is represented using the semantics defined by the MPEG7 standard.

Claim 4. (Currently Amended) A service description document according to one of Claims 1 to [[3]] 2, characterized in that said description of abstract constraints is represented in a mark-up language of the XML type.

Claim 5. (Currently Amended) A service description document according to one of Claims 1 to [[4]] 2, characterized in that said description of abstract constraints is represented in a schema language such as XML-Schema or Relax-NG, tags being defined using the semantics of the MPEG7 standard.

Claim 6. (Currently Amended) A service description document according to one of Claims 1 to [[4]] 2, characterized in that said description of abstract constraints is represented in a description language of a content of the multimedia document, ~~said~~ tags being adapted to integrate directly or by reference attributes represented in a schema mark-up language such as XML-Schema.

Claim 7. (Currently Amended) A service description document in accordance with Claim 6, characterized in that the description language of a content of [[a]] the multimedia document is defined according to the MPEG7 standard.

Claim 8. (Currently Amended) A service description document according to one of Claims 1 to [[4]] 2, characterized in that said description of abstract constraints is represented in a schema language such as Schematron adapted to define a set of minimum

constraints.

Claim 9. (Currently Amended) A service description document according to one of Claims 1, 2 and 7 ~~to 8~~, characterized in that said description of abstract constraints is inserted in a sub-part of said first abstract part adapted to describe an abstract structure of the messages exchanged.

Claim 10. (Original) A service description document according to Claim 9, characterized in that said first abstract part comprises a second sub-part adapted to declare at least one elementary message pointing to said description of abstract constraints.

Claim 11. (Original) A service description document according to Claim 10, characterized in that said elementary message is associated with an attribute adapted to specify that the message comprises a binary multimedia content type.

Claim 12. (Currently Amended) A method of producing a request for a service offered by a server ~~(S)~~ in a communication network ~~(10)~~, ~~said~~ the service being described in a service description document according to one of Claims ~~1 to 11~~ 1, 2, 7, 10 and 11, characterized in that it comprises the following steps:

- reading ~~(E20)~~ said the description document of a service;

- selecting (~~E21~~) a first abstract part adapted to describe at least one message exchanged over the communication network when an operation associated with ~~said~~ the service is implemented;

- extracting (~~E22~~) a description of abstract constraints associated with a binary multimedia document;

- selecting (~~E23~~) a binary multimedia document according to ~~said~~ the description of abstract constraints; and

- producing (~~E26~~) a request intended for the server in the communication network including ~~said~~ the binary multimedia document selected.

Claim 13. (Currently Amended) A method of validating a multimedia document when a service offered by a server (~~S~~) in a communication network (~~10~~) is implemented, the service being associated with a service description document, characterized in that it comprises the following steps:

- acquiring (~~E10~~) the multimedia document;
- extracting (~~E11~~) a description of abstract constraints associated with a binary multimedia document from ~~said~~ the description document of a service;

- extracting (~~E12~~) a content description associated with ~~said~~ the multimedia document; and

- comparing (~~E13~~) ~~said~~ the content description and the description of abstract constraints extracted from the service description document.

Claim 14. (Currently Amended) A method of validating according to Claim 13, characterized in that ~~said~~ the description of abstract constraints is represented in a language describing a content of a multimedia document.

Claim 15. (Original) A method of validating according to one of Claims 13 or 14, characterized in that the language describing a content of the multimedia document is defined under the MPEG7 standard.

Claim 16. (Currently Amended) A method of validating according to one of Claims 13 to ~~[[15]]~~ 14, characterized in that, at ~~the~~ said extraction step (~~E12~~), an MPEG7 description of the multimedia document inserted in ~~said~~ the multimedia document is extracted.

Claim 17. (Currently Amended) A method of validating according to one of Claims 13 to ~~[[16]]~~ 14, characterized in that it is implemented during a step (~~E23~~) of selecting a multimedia document to be inserted in message exchanged during the implementation of a service offered by a server in the communication network.

Claim 18. (Currently Amended) A method of validating according to one of Claims 13 to ~~[[16]]~~ 14, characterized in that it is implemented during a step (~~E31~~) of validating a request received by a server in a communication network for implementing a service described in a service description document.

Claim 19. (Currently Amended) A device for producing a request for a service offered by a server in a communication network, ~~said~~ the service being described in a service description document in accordance with one of Claims ~~1 to 11~~ 1, 2, 7, 10 and 11, characterized in that it comprises:

- means ~~(100, 101, 102)~~ for reading said description document of a service;

- means ~~(100, 101, 102)~~ for selecting a first abstract part adapted to describe at least one message exchanged over the communication network when an operation associated with ~~said~~ the service is implemented;

- means ~~(100, 101, 102)~~ for extracting a description of abstract constraints associated with a binary multimedia document;

- means ~~(100, 101, 102)~~ for selecting a binary multimedia document according to ~~said~~ the description of abstract constraints; and

- means ~~(100, 101, 102)~~ for producing a request intended for the server in the communication network including ~~said~~ the binary multimedia document selected.

Claim 20. (Currently Amended) A device for producing a request for a service in accordance with Claim 19, characterized in that it is incorporated in:

- a microprocessor ~~(100)~~;
- a read only memory ~~(101)~~ adapted to store a program for producing a request for a service; and

- a random access memory (102) comprising registers adapted to store the variables modified during the running of ~~said~~ the program.

Claim 21. (Currently Amended) A device for validating a multimedia document during the implementation of a service offered by a server in a communication network, the service being associated with a service description document, characterized in that it comprises:

- means (100, 101, 102) for acquiring the multimedia document;
- means (100, 101, 102) for extracting a description of abstract constraints associated with ~~[[a]]~~ the binary multimedia document from the description document of a service;
- means (100, 101, 102) for extracting a content description associated with ~~said~~ the multimedia document; and
- means (100, 101, 102) for comparing ~~said~~ the content description and the description of abstract constraints extracted from the service description document.

Claim 22. (Currently Amended) A device for validating a multimedia document according to Claim 21, characterized in that it is incorporated in:

- a microprocessor (100);
- a read only memory (101) adapted to store a program validating a multimedia document; and

- a random access memory (~~102~~) comprising registers adapted to store variables modified during the running of ~~said~~ the program.

Claim 23. (Currently Amended) A server computer in a communication network, characterized in that it comprises means adapted to implement the validation method according to one of Claims 13 to ~~[[18]]~~ 14.

Claim 24. (Currently Amended) A client computer in a communication network, characterized in that it comprises means adapted to implement the validation method according to one of Claims 13 to ~~[[18]]~~ 14.

Claim 25. (Original) A client computer in a communication network, characterized in that it comprises means adapted to implement the method of producing a request in accordance with Claim 12.

Claim 26. (Currently Amended) A communication network, characterized in that it comprises means adapted to implement the validation method according to one of Claims 13 to ~~[[18]]~~ 14.

Claim 27. (Original) A communication network, characterized in that it comprises means adapted to implement the method of producing a request in accordance with Claim 12.



Claim 28. (Currently Amended) An information storage means, possibly totally or partially removable, which can be read by a computer system, comprising instructions for a computer program adapted to implement the method of validating a multimedia document in accordance with one of Claims 13 to ~~[[18]]~~ 14, when this program is loaded in and run by the computer system.

Claim 29. (Original) An information storage means, possibly totally or partially removable, which can be read by a computer system, comprising instructions for a computer program adapted to implement the method of producing a request according to Claim 12, when this program is loaded in and run by the computer system.

Claim 30. (Currently Amended) A computer program which can be read by a microprocessor, comprising portions of software code adapted to implement the method of validating a multimedia document according to one of Claims 13 to ~~[[18]]~~ 14, when this computer program is loaded in and run by the microprocessor.

Claim 31. (Original) A computer program which can be read by a microprocessor, comprising portions of software code adapted to implement the method of producing a multimedia document according to Claim 12, when this computer program is loaded in and run by the microprocessor.